	Application No.	Applicant(s)
Office Action Summary	10/766,926	SASHIDA ET AL.
	Examiner	Art Unit	
	Robert M. Timblin	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 November 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This Office Action corresponds to application 10/766,926 filed 1/30/2004. Response to

arguments begins on page 16 of this action.

Response to Amendment

Applicant has amended claims 1, 6, 11-15 and added new claims 16-17. Accordingly,

claims 1-17 are currently pending.

Claim Objections

Independent claims 1, 6, and 11-15 are objected to because it is unclear whether there are

two different instances of a problem or a single instance. For example, claim 1 describes *a*

problem (line 5 of the claim) and further, know-how information about *a* problem (line 8-9 of the

claim) is received. Therefore it is unclear if the problem detected in line 5 and the problem

described in line are the same problem. The Examiner respectfully requests clarification as to

what problem is detected and what problem receives know-how information.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions
> and requirements of this title.

Claims 1, 6, and 15 and their respective depending claims are rejected under 35

U.S.C. 101 because they are directed towards non statutory subject matter. Specifically, the

system as claimed may be accomplished by software components, leading to the interpretation

that the system is software per se. There is no use of hardware indicated in the claims to define a

machine claim. If Applicant intends the system in these claims to be a machine, there needs to

be some form of a structural part of a device or combination of devices as part of the system.

Without the use of hardware, the claim is software (i.e. functional descriptive material) and

needs to be stored in memory or other computer readable storage medium to impart functionality

in a computer. See MPEP 2106.01.

Claim Rejections - 35 USC § 112

The previous 35 U.S.C. 112 rejection is withdrawn in light of applicant's amendments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-3, 5, 11, 13, and 15-16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Stier in view of Britt et al. ('Britt' hereafter) U.S. Patent 6,161,017.

With respect to claim 1, Stier teaches A database search system for searching a database

for data, comprising:

a unit for measuring an input number of search conditions (drawing reference 401, query counter, and figures 8-9) input during a period from a start to an end of search processing (col. 12 line 18-19);

a unit for receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2), said know-how information (drawing reference 3, figure 5) being requested (col. 3 line 19-21, col. 9 line 1-6) from a user (drawing reference 3, figure 5) from a user when it is determined that the problem occurs (col. 8 line 59-63; i.e. a user creates a memo outlining a problem);

a unit for storing (drawing reference 35) the input message (figure 5) in a know-how database (drawing reference 35) under a condition that the input message (figure 5) is associated with all the search conditions input during an execution period of the search processing (col. 9 line 18-22 and col. 12 line 55-58).

Stier does not expressly teach a unit for determining that a problem occurs during the search processing when the input number measured at the end of the search processing exceeds a predetermined threshold value.

Britt, however, teaches a unit for determining that a problem occurs during the search processing when the input number (figure 2, drawing references 25-31) measured at the end of the search processing exceeds a predetermined threshold value (27 or 31 of figure 2 and col. 3 line 60-67) for determining an error during a search processing.

In the same field of endeavor, (i.e. determining a problem occurrence during a search session), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Britt would have given Stier a way to determine the occurrence of an error after a number of queries have been counted for the benefit of indicating a problem. Such a benefit would have been realized by Stier to analyze and review in order to improve the use and searchability of their knowledge base when trying to improve their knowledge hit rate metric 434 (e.g. see Stier at col. 11 line 30-35).

With respect to claim 2, Stier teaches the database search system according to claim 1, wherein during execution of the search processing, the search conditions input by the user are compared (col. 8 line 17-33, i.e. Stier discloses finding a unique query and response) with search conditions stored in the know-how database (drawing reference 35) every time the search conditions are received (col. 8 line 17-33), and in a case where a predetermined number of one or more search conditions are matched with each other, the message associated with the search conditions (col. 8 line 17-18, i.e. combined query and response) stored in the know-how database is output to the user (col. 8 line 42-54).

With respect to claim 3, the database search system according to claim 1, wherein when the user inputs the message on know-how, another or a plurality of users to be provided with the

message is specified, and the message is output only to the another or plurality of users (col. 8 line 61-63, i.e. Stier discloses review of a created memo by authors and analysts).

With respect to claim 5, Stier teaches the database search system according to claim 1, wherein when the user inputs the message on know-how, the search condition which is associated with know-how (col. 8 line 17-18, i.e. combined query and response) is selectable by the user from a plurality of the search conditions (col. 8 line 47-54).

With respect to claim 11, A database search method for searching a database for data, comprising;

measuring an input number of search conditions (drawing reference 401, query counter, and figures 8-9) input during a period from a start to an end of search processing (col. 12 line 18-19);

receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2) corresponding to contents of the search processing from a user (agent 13), said know-how information (drawing reference 3, figure 5) being requested (col. 3 line 19-21, col. 9 line 1-6) from a user (drawing reference 3, figure 5) in response to the input number measured (drawing reference 401, query counter, and figures 8-9) at the end of the search processing exceeding a predetermined threshold value (col. 9 line 1-5, col. 3 line 19-21); and

a unit for storing (drawing reference 35) the input message (figure 5) in a know-how database (drawing reference 35) under a condition that the input message (figure 5) is associated with all the search conditions input during an execution period of the search processing (col. 9 line 18-22 and col. 12 line 55-58).

Stier does not expressly teach determining that a problem occurs during the search processing when the input number measured at the end of the search processing exceeds a predetermined threshold value.

Britt, however, teaches a unit for determining that a problem occurs during the search processing when the input number (figure 2, drawing references 25-31) measured at the end of the search processing exceeds a predetermined threshold value (27 or 31 of figure 2 and col. 3 line 60-67) for determining an error during a search processing.

In the same field of endeavor, (i.e. determining a problem occurrence during a search session), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Britt would have given Stier a way to determine the occurrence of an error after a number of queries have been counted for the benefit of indicating a problem. Such a benefit would have been realized by Stier to analyze and review in order to improve the use and searchability of their knowledge base.

With respect to claim 13, A program product storing a computer-executable program for embodying a database search method for searching a database for data in a recording medium,

the program comprising instructions for allowing a computer to execute the following operations
of:

measuring an input number of search conditions (drawing reference 401, query counter,
and figures 8-9) input during a period from a start to an end of search processing (col. 12 line 18-
19);

receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing
know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2)
corresponding to contents of the search processing from a user (agent 13), said know-how
information (drawing reference 3, figure 5) being requested (col. 3 line 19-21, col. 9 line 1-6)
from a user (drawing reference 3, figure 5) when it is determined that the problem occurs (col. 8
line 59-63; i.e. a user creates a memo outlining a problem);

storing (drawing reference 35) the input message (figure 5) in a know-how database
(drawing reference 35) under a condition that the input message (figure 5) is associated with all
the search conditions input during an execution period of the search processing (col. 9 line 18-22
and col. 12 line 55-58).

Stier does not expressly teach a unit for determining that a problem occurs during the
search processing when the input number measured at the end of the search processing exceeds a
predetermined threshold value.

Britt, however, teaches a unit for determining that a problem occurs during the search
processing when the input number (figure 2, drawing references 25-31) measured at the end of

the search processing exceeds a predetermined threshold value (27 or 31 of figure 2 and col. 3 line 60-67) for determining an error during a search processing.

In the same field of endeavor, (i.e. determining a problem occurrence during a search session), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Britt would have given Stier a way to determine the occurrence of an error after a number of queries have been counted for the benefit of indicating a problem. Such a benefit would have been realized by Stier to analyze and review in order to improve the use and searchability of their knowledge base.

With respect to claim 15, A database search system for searching a database for data, comprising:

a unit for measuring an input number of search conditions (drawing reference 401, query counter, and figures 8-9) input during a period from a start to an end of search processing (col. 12 line 18-19);

a unit for receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2) occurring during the search processing (col. 8 line 56-63), said know-how information (drawing reference 3, figure 5) being requested from a user when it is determined that the problem occurs (col. 8 line 59-63; i.e. a user creates a memo outlining a problem);

Stier does not expressly teach a unit for determining that a problem occurs during the search processing when the input number measured at the end of the search processing exceeds a predetermined threshold value.

Britt, however, teaches a unit for determining that a problem occurs during the search processing when the input number (figure 2, drawing references 25-31) measured at the end of the search processing exceeds a predetermined threshold value (27 or 31 of figure 2 and col. 3 line 60-67) for determining an error during a search processing.

In the same field of endeavor, (i.e. determining a problem occurrence during a search session), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Britt would have given Stier a way to determine the occurrence of an error after a number of queries have been counted for the benefit of indicating a problem. Such a benefit would have been realized by Stier to analyze and review in order to improve the use and searchability of their knowledge base.

With respect to claim 16, Stier teaches wherein the end of the search processing is determined by detecting that an elapsed time after inputting a search condition is longer than a predetermined time (col. 2 line 59-63; i.e. monitoring the number of requests given in a certain period of time).

Claims 6-8, 10, 12, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stier in view of Jason Schmidt ('Schmidt') ("Finding and Fixing Troublesome Long-Running Ingres Queries. Comprehensive Consulting Solutions Inc. p. 1-8, May 2000).

With respect to claim 6, Stier teaches A database search system for searching a database for data, comprising:

a unit for measuring a necessary time (figure 13) taken from a start to an end of search processing (col. 11 line 47-51, i.e. turnaround time);

a unit for receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2) occurring during the search processing from a user, said know-how information be requested when it is determined that the problem occurs (col. 8 line 59-63; i.e. a user creates a memo outlining a problem); and

a unit for storing (drawing reference 35) the input message (figure 5) in a know-how database (drawing reference 35) under a condition that the input message (figure 5) is associated with all the search conditions input during an execution period of the search processing (col. 9 line 18-22 and col. 12 line 55-58).

Stier does not expressly teach a unit for determining that a problem occurs during the search processing when the necessary time measured at the end of the search processing exceeds a predetermined threshold value;

Schmidt, however, teaches a unit for determining that a problem occurs during the search

processing when the input number measured at the end of the search processing exceeds a

predetermined threshold value (page 1, overview and page 2 and the section labeled 'System';

i.e. Schmidt discloses a system that detects long-running queries that pass over a given

threshold);

In the same field of endeavor, (i.e. detecting problems in information processing), it

would have been obvious to one of ordinary skill in the data processing art at the time of the

present invention to combine the teachings of the cited references because the teachings of

Schmidt would have given Stier the notification of a problem with a search exceeding a time

threshold for the benefit of giving analysts a way to improve the searchability and use of their

knowledge base.

With respect to claim 7, the database search system according to claim 1, wherein during

execution of the search processing, the search conditions input by the user are compared (col. 8

line 17-33, i.e. Stier discloses finding a unique query and response) with search conditions stored

in the know-how database (drawing reference 35) every time the search conditions are received

(col. 8 line 17-33), and in a case where a predetermined number of one or more search conditions

are matched with each other, the message associated with the search conditions (col. 8 line 17-

18, i.e. combined query and response) stored in the know-how database is output to the user (col.

8 line 42-54).

With respect to claim 8, the database search system according to claim 1, wherein when the user inputs the message on know-how, another or a plurality of users to be provided with the message is specified, and the message is output only to the another or plurality of users (col. 8 line 61-63, i.e. Stier discloses review of a created memo by authors and analysts).

With respect to claim 10, the database search system according to claim 6, the database search system according to claim 1, wherein when the user inputs the message on know-how, the search condition which is associated with know-how (col. 8 line 17-18, i.e. combined query and response) is selectable by the user from a plurality of the search conditions (col. 8 line 47-54).

With respect to claim 12, A database search method for searching a database for data, comprising;

measuring a necessary time (figure 13) taken from a start to an end of search processing (col. 11 line 47-51, i.e. turnaround time);

determining that a problem occurs during the search processing when the necessary time measured at the end of the search processing exceeds a predetermined threshold value;

receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2) corresponding to contents of the search processing from a user (agent 13), said know-how information (drawing reference 3, figure 5) being requested (col. 3 line 19-21, col. 9 line 1-6) from a user (drawing reference 3, figure 5) when it is determined that the problem occurs; and

storing (drawing reference 35) the input message (figure 5) in a know-how database (drawing reference 35) under a condition that the input message (figure 5) is associated with all the search conditions input during an execution period of the search processing (col. 9 line 18-22 and col. 12 line 55-58).

With respect to claim 14, A program product storing a computer-executable program for embodying a database search method for searching a database for data in a recording medium, the program comprising instructions for allowing a computer to execute the following operations of:

measuring a necessary time (figure 13) taken from a start to an end of search processing (col. 11 line 47-51, i.e. turnaround time);

determining that a problem occurs during the search processing when the necessary time measured at the end of the search processing exceeds a predetermined threshold value;

receiving (figure 1e, drawing reference 20) an input of a message (figure 5) describing know-how information (drawing reference 3, figure 5) about a problem (drawing reference 2) corresponding to contents of the search processing from a user (agent 13), said know-how information (drawing reference 3, figure 5) being requested (col. 3 line 19-21, col. 9 line 1-6) from a user (drawing reference 3, figure 5) when it is determined that the problem occurs; and

storing (drawing reference 35) the input message (figure 5) in a know-how database (drawing reference 35) under a condition that the input message (figure 5) is associated with all

the search conditions input during an execution period of the search processing (col. 9 line 18-22

and col. 12 line 55-58).

With respect to claim 17, Stier teaches wherein the end of the search processing is

determined by detecting that an elapsed time after inputting a search condition is longer than a

predetermined time (col. 2 line 59-63; i.e. monitoring the number of requests given in a certain

period of time).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stier as

applied to claims 1-3, 5-8, and 10-15 above in view of Birkhoelzer et al. ('Birkhoelzer'

hereafter) (U.S. Patent Application 2003/0140030).

With respect to claim 4 and similar claim 9, Stier fails to explicitly teach wherein

the message is voice data storing uttered contents of the user.

Birkhoelzer, however, teaches wherein the message is voice data storing uttered contents

of the user (paragraph [0036] for storing voice data.

In the same field of endeavor, (i.e. input storage), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Birkhoelzer would have given Stier an efficient method to store input data, such as voice data, for the benefit of having a simple way of communicating data, such as a memo, to a computer. Birkhoelzer discloses in paragraph [0004] of inputting memos in a datafile that a user agent (13) of Stier could have used for a more user-friendly system.

Response to Arguments

Applicant's arguments in the response filed 11/21/2007 have been fully considered but they are not persuasive. Specifically, the arguments concerning the 35 U.S.C. 101 rejection of claims 1, 6, and 15 are unpersuasive as the "unit" found in these claims do not clearly indicate a hardware component in the recited system. The examiner submits that the "unit" may be construed as a software component. For example, Applicant's publication at paragraph 0035 states "the program includes instructions allowing a computer to measure an input number of search conditions..." The Applicant justifies the claimed "unit for measuring an input number of search conditions" as a search condition input number measuring part (15) in figure 1 and thus can be hardware (see arguments, 4th paragraph of page 7). However, the search condition input number measuring part is merely a labeled box and gives no indication of being a hardware component of a system. Further, a query of "define: unit" from Google.com has a definition for "unit" as the smallest piece of software that can be independently tested (i.e., compiled or

assembled, loaded, and tested) (see www.ee.oulu.fi/research/ouspg/sage/glossary/ for reference).

As a "unit" in the present claims can be interpreted as software, the 101 rejection is maintainted.

Applicant's arguments with respect to claims 1, 6, 11, 12, 13, 14, 15 have been considered but are moot in view of the new ground(s) of rejection.   With respect to the aforementioned claims, Stier is not seen to explicitly disclose "a unit for determining that a problem occurs during the search processing when the input number measured at the end of the search processing exceeds a predetermined threshold value," or "a unit for determining that a problem occurs during the search processing when the necessary time measured at the end of the search processing exceeds a predetermined threshold" value as recited in the claims.

However, the newly cited references of Britt and Schmidt teach the amended claims accordingly in combination with Stier.

Specifically, Britt teaches monitoring a count of input queries and thereafter determines that an error (i.e. problem) occurs if a threshold is crossed. That is, the error determined in Britt can be broadly interpreted to the problem found in Applicant's claims 1, 11, 13 and 15. Also, with Stier outlining a problem that occurs during searching in a memo (col. 8 line 57-63) an input message of know-how information occurring during the search processing from a user is taught.

Schmidt is seen to disclose determining that a problem occurs when the time measured at the end of the search processing exceeds a predetermined threshold value. In other words, Schmidt finds queries that take too long during a period of time (see Schmidt, page 2) which would have given Stier an indication of a problem in the use of their knowledge base.

Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application 2002/0073065 A1 to Inaba et al. The subject matter disclosed therein pertains to the pending claims (i.e. query feed back).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert Timblin

Patent Examiner AU 2167